

2025 RELEASE UNDER E.O. 14176

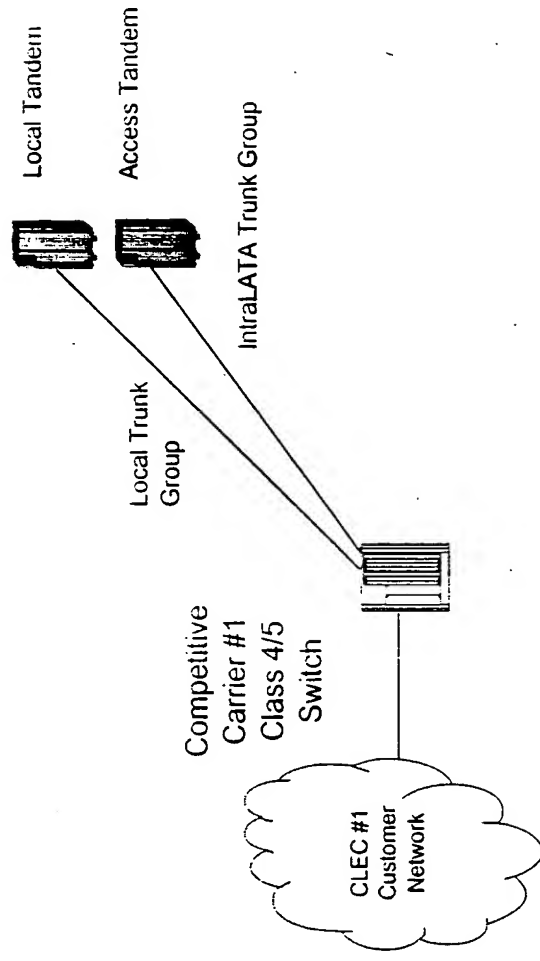
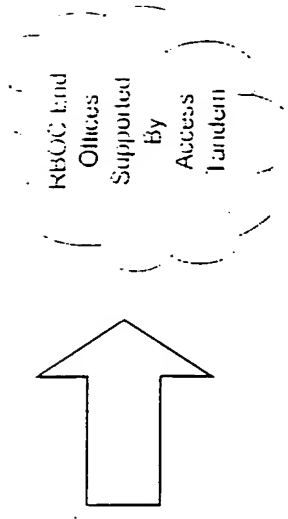


FIGURE 1A

PRIOR ART

2025 RELEASE UNDER E.O. 14176

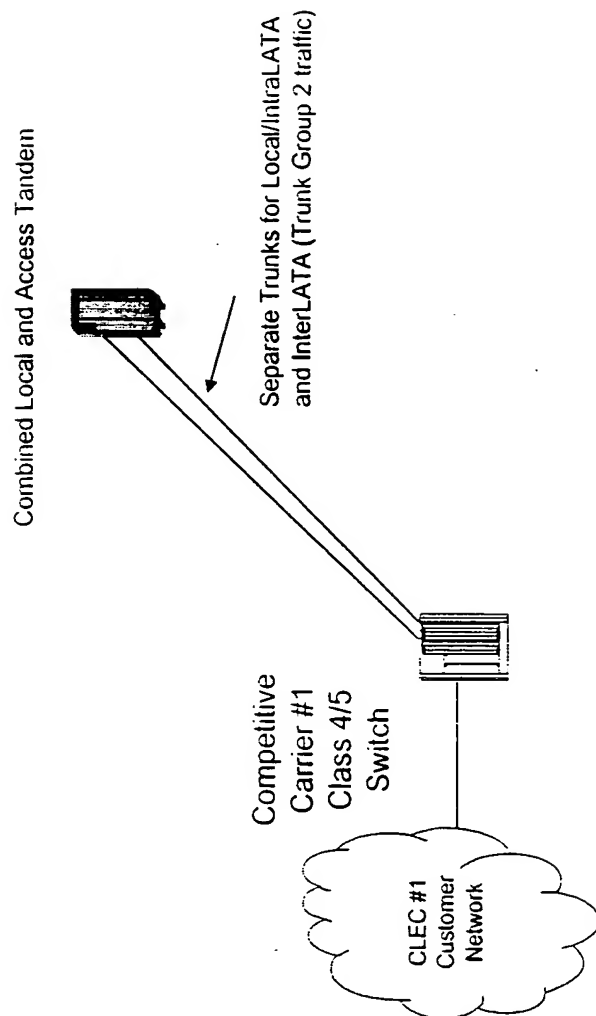
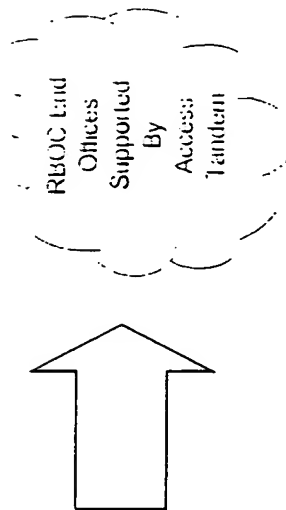


FIGURE 1B

Prior Art

307050 555/3007

# Ameritech LATA 357 Tandem Trunk Group 1 Requirements

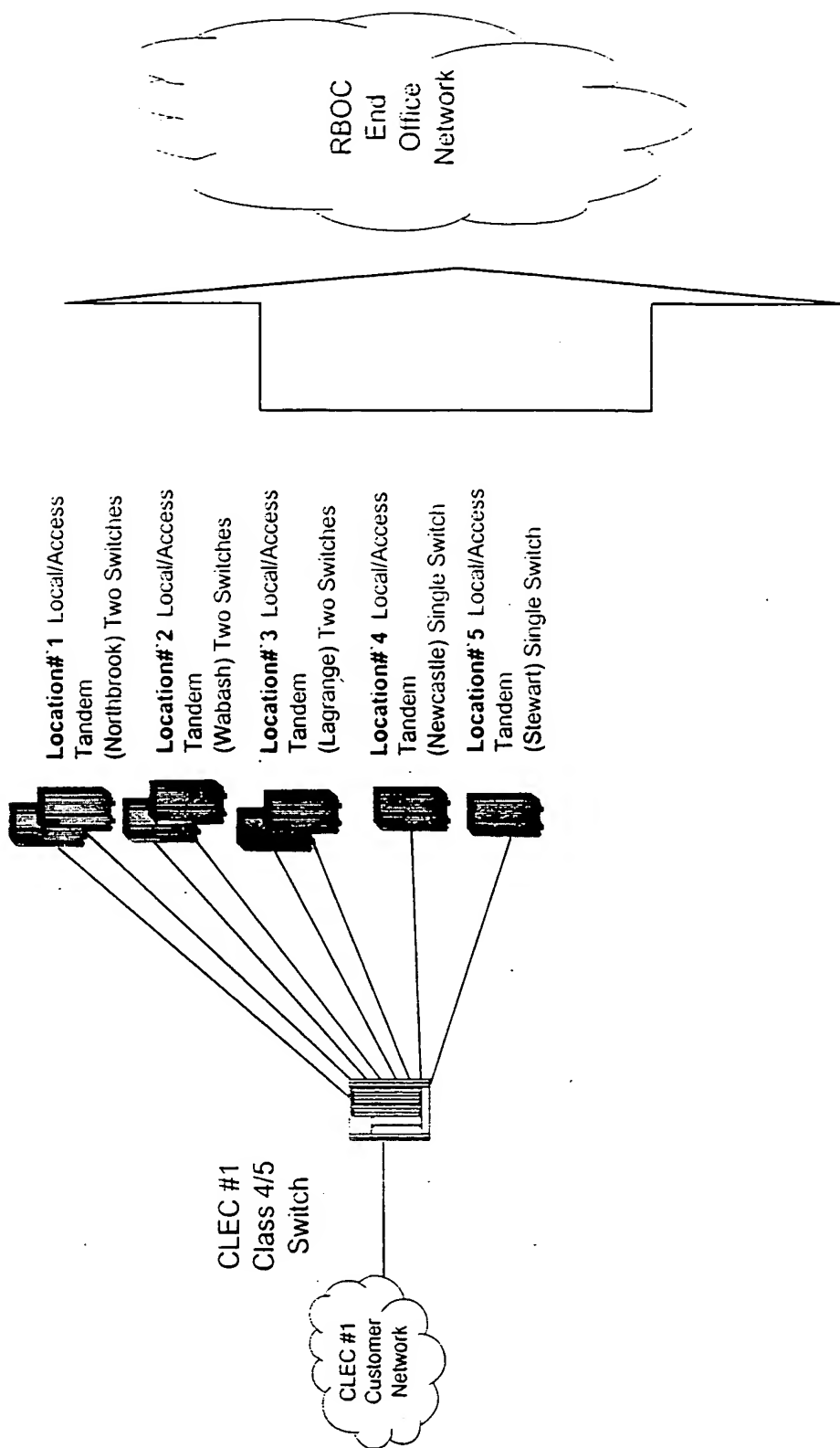
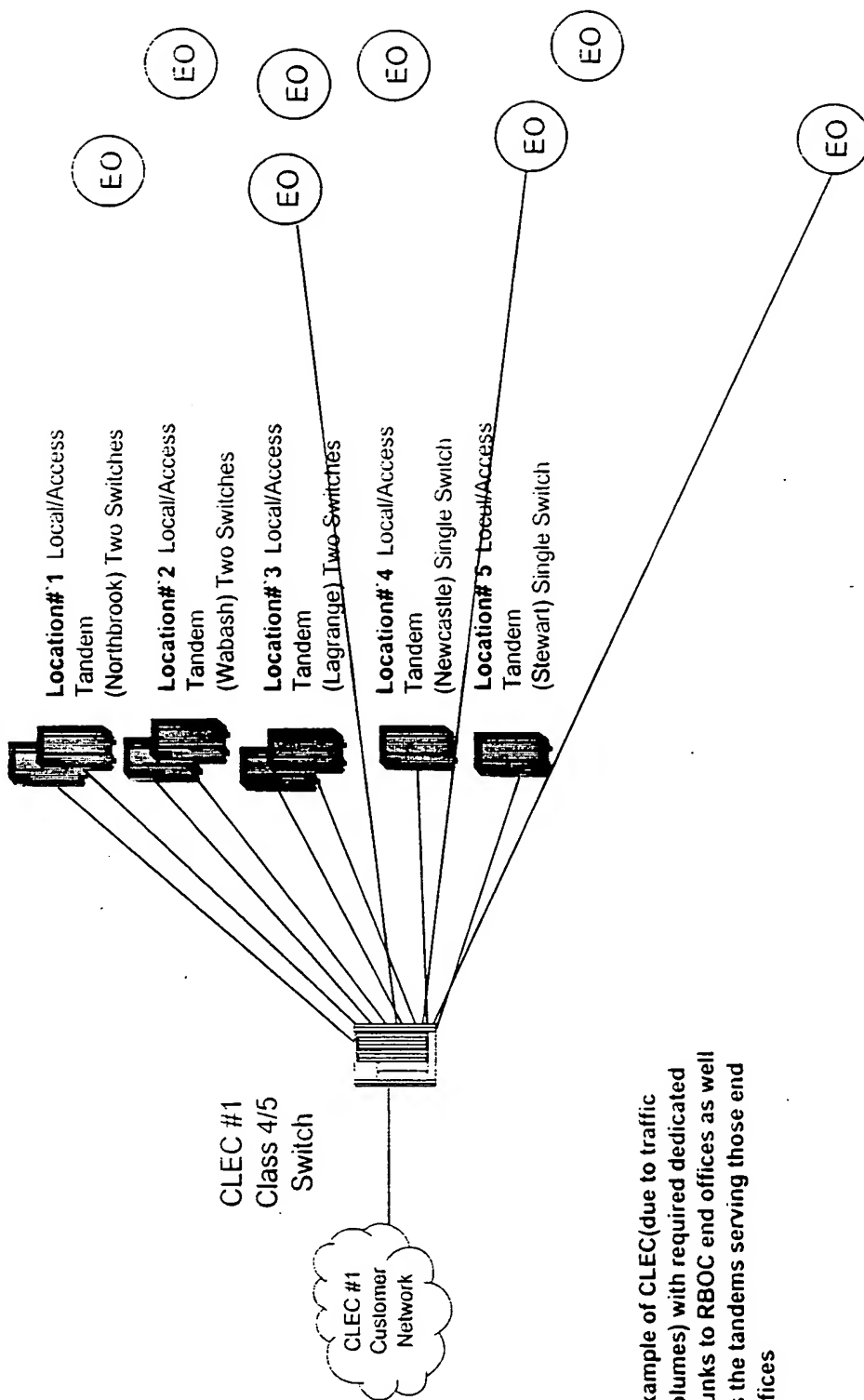


FIGURE 2

Prior Art

# Ameritech LATA 357 Tandem Trunk Group 1 Requirements



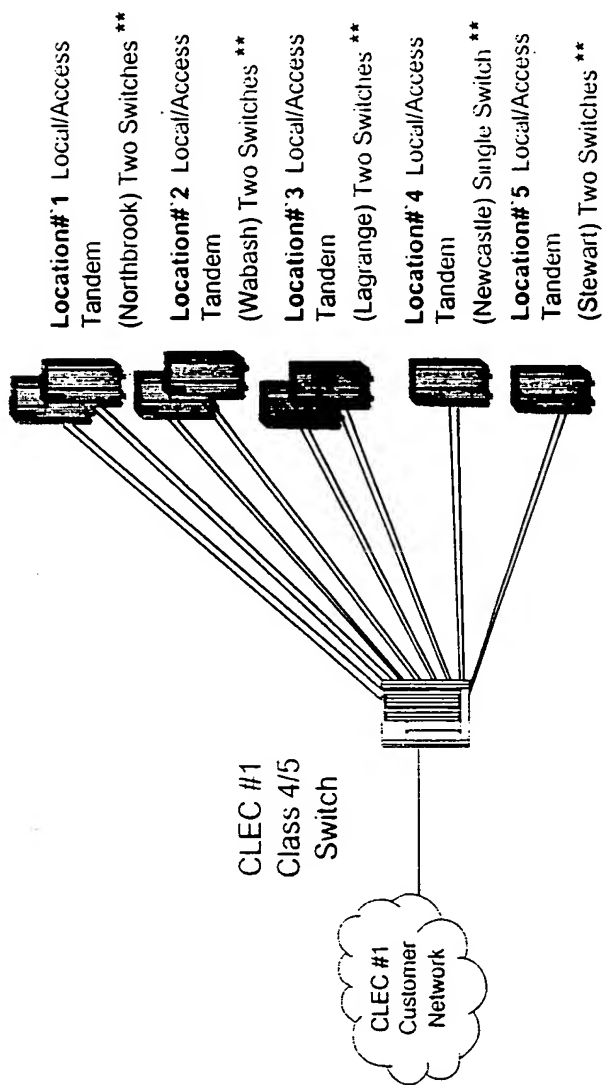
Example of CLEC (due to traffic volumes) with required dedicated trunks to RBOC end offices as well as the tandems serving those end offices

FIGURE 3

Prior Art

207050 "535/8801"

# Ameritech LATA 357 Tandem Trunk Group 2 Requirements



\*\* Each Combined Local/Access Tandem requires two trunk types: Local/IntraLATA and InterLATA

FIGURE 4

Prior Art

20100505 5:35:30 PM

### Ameritech LATA 357 Tandem Trunk Group 3 Requirements

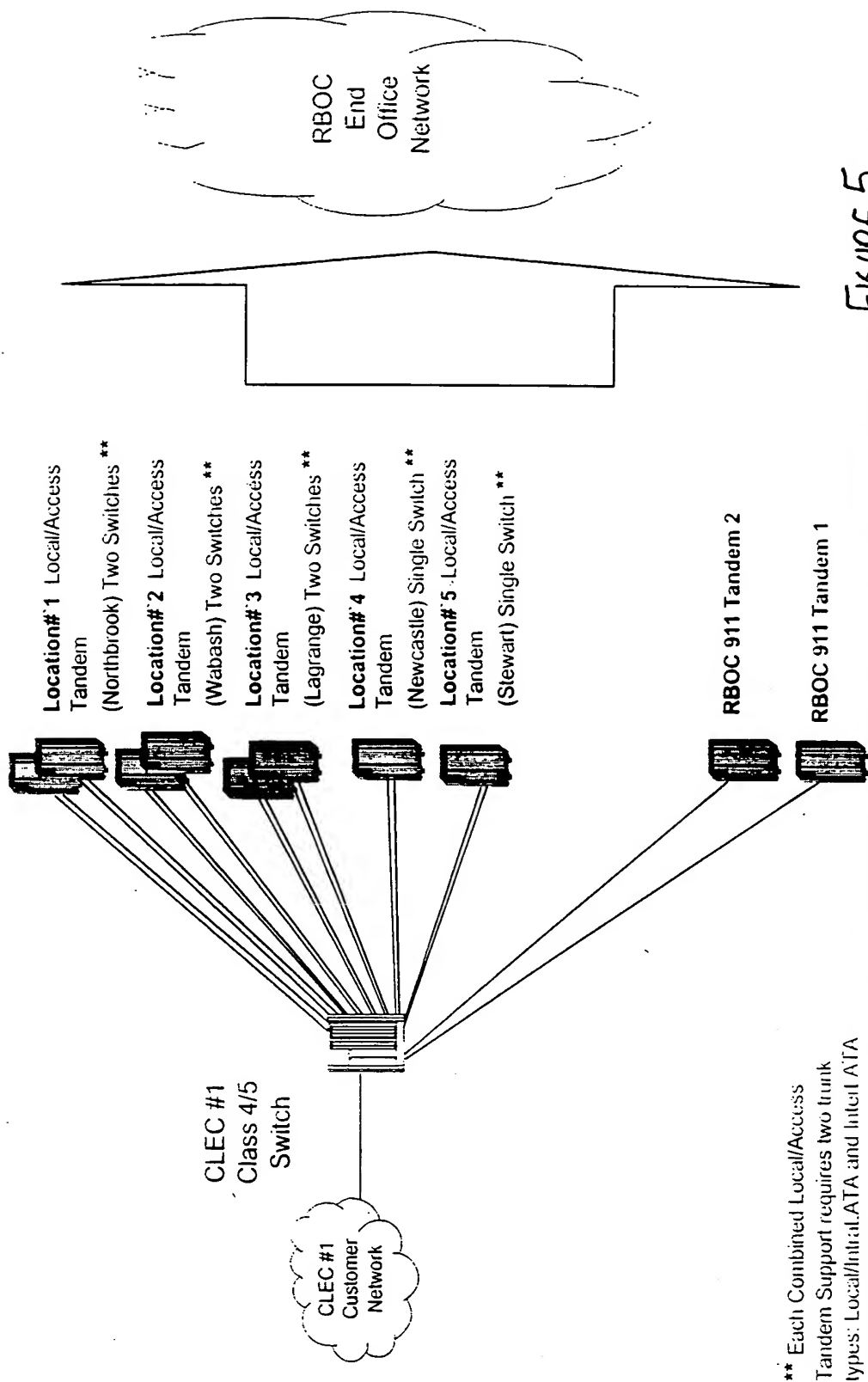
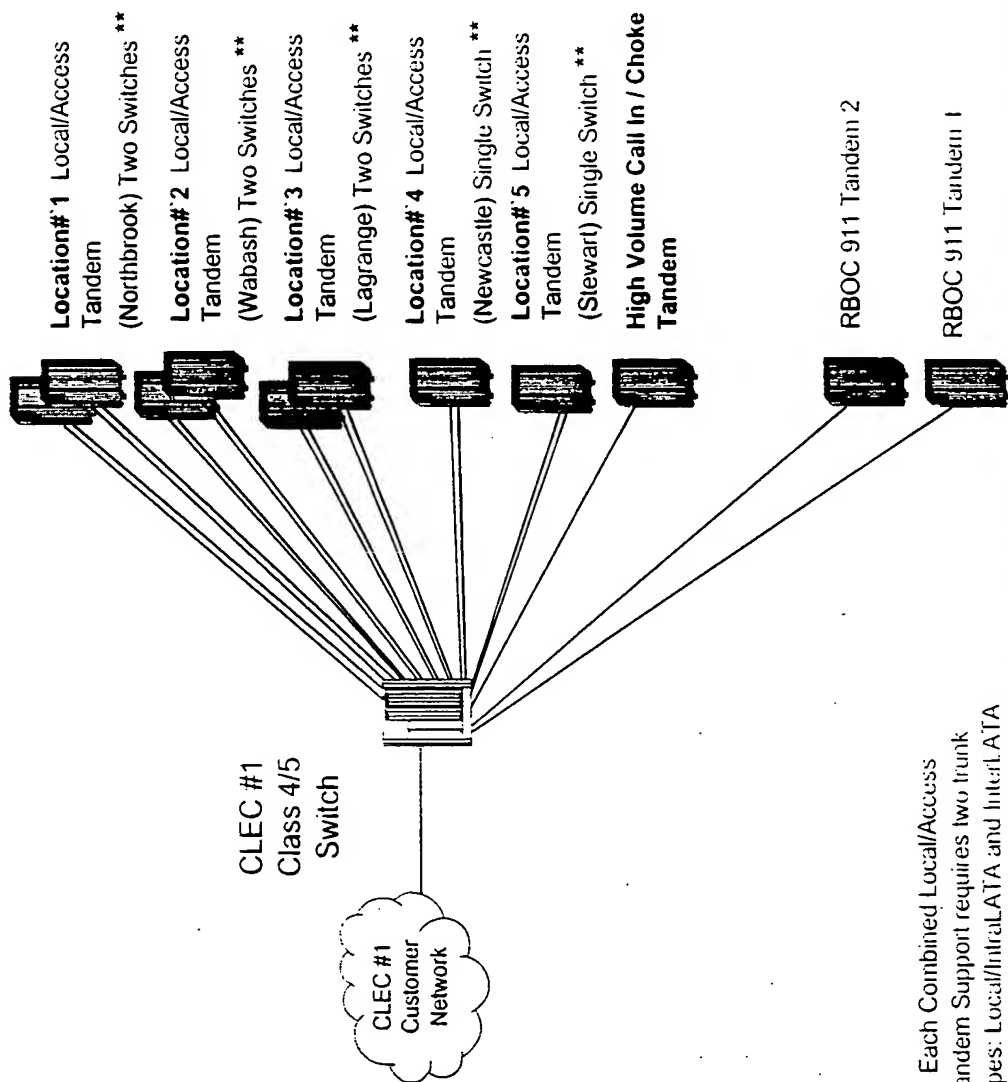


FIGURE 5

Prior Art

307050 "535/800"

# Ameritech LATA 357 Tandem Trunk Group 4 Requirements



\*\* Each Combined Local/Access Tandem Support requires two trunk types: Local/IntraLATA and InterLATA

FIGURE 6

PRIOR ART

207050-535/8007

## Ameritech LATA 357 Tandem Trunk Group 5 Requirements

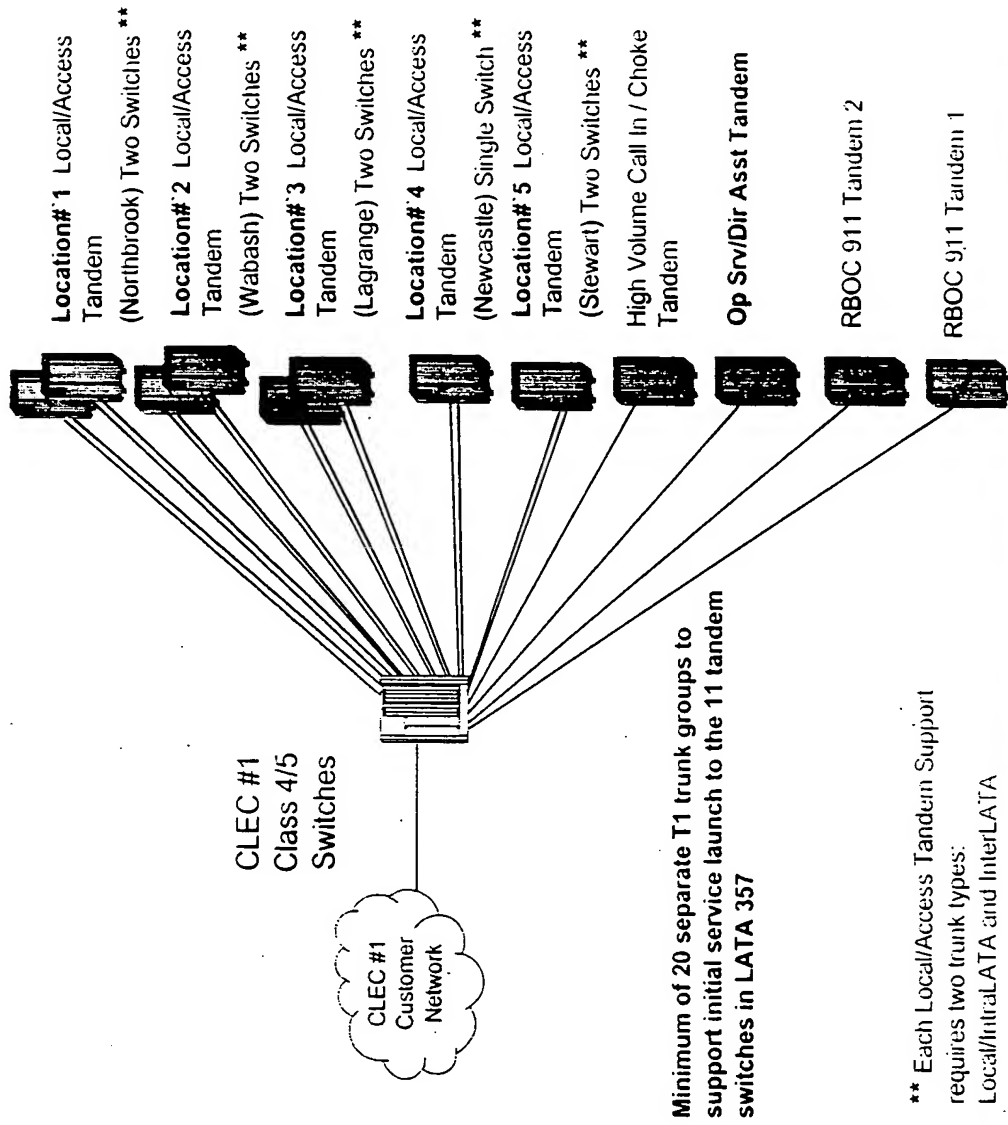


FIGURE 7

Prior Art



Port Costs: Transporting to various Tandem Switches requires

Trunk groups to be managed by Port Costs:

DS1, DS3, STS-1

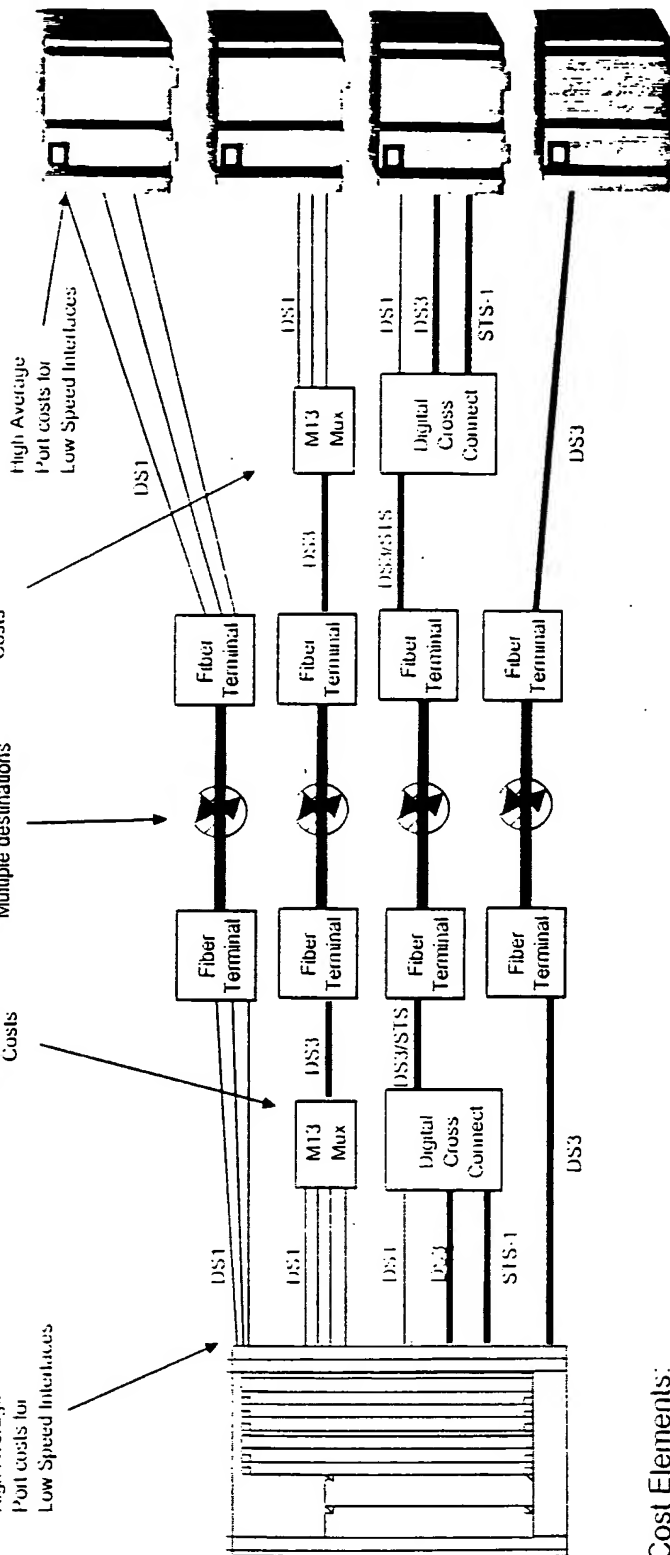
High Average  
Port costs for  
Low Speed Interfaces

Mux/DCS  
Costs

Transport  
Costs to  
Multiple destinations

Mux/DCS  
Costs

RBOC Tandems are circuit switches which require on most occasions, DS1s for trunk termination. In some situations, larger DS3s terminations may be offered.



### Cost Elements:

- Port Costs. DS1s are used for both the Carrier and the RBOC Tandem when call volume to the Tandem does not justify a DS3, and will not grow past a couple of T1s (e.g. E911, OP/DA, Choke)
- DS3s are the primary interface used for the Carrier when high volume Tandem traffic (Local, IntraLATA, InterLATA) is planned. However, M13 muxes or DCS systems are necessary at the RBOC Tandem CO to allow for managed growth of the Tandem switch ports to reduce the DS3s to 1:1s.
- Trunk groups are transported via owned, RBOC leased or third party leased fiber facilities
- Complexity of Planning requires additional  $\$1,500,000$ , low fill rate of transport, multiple transport elements, network monitoring, provisioning

FIGURE 8

Prior ART

# Ameritech LATA 357 Tandem Trunking Requirements

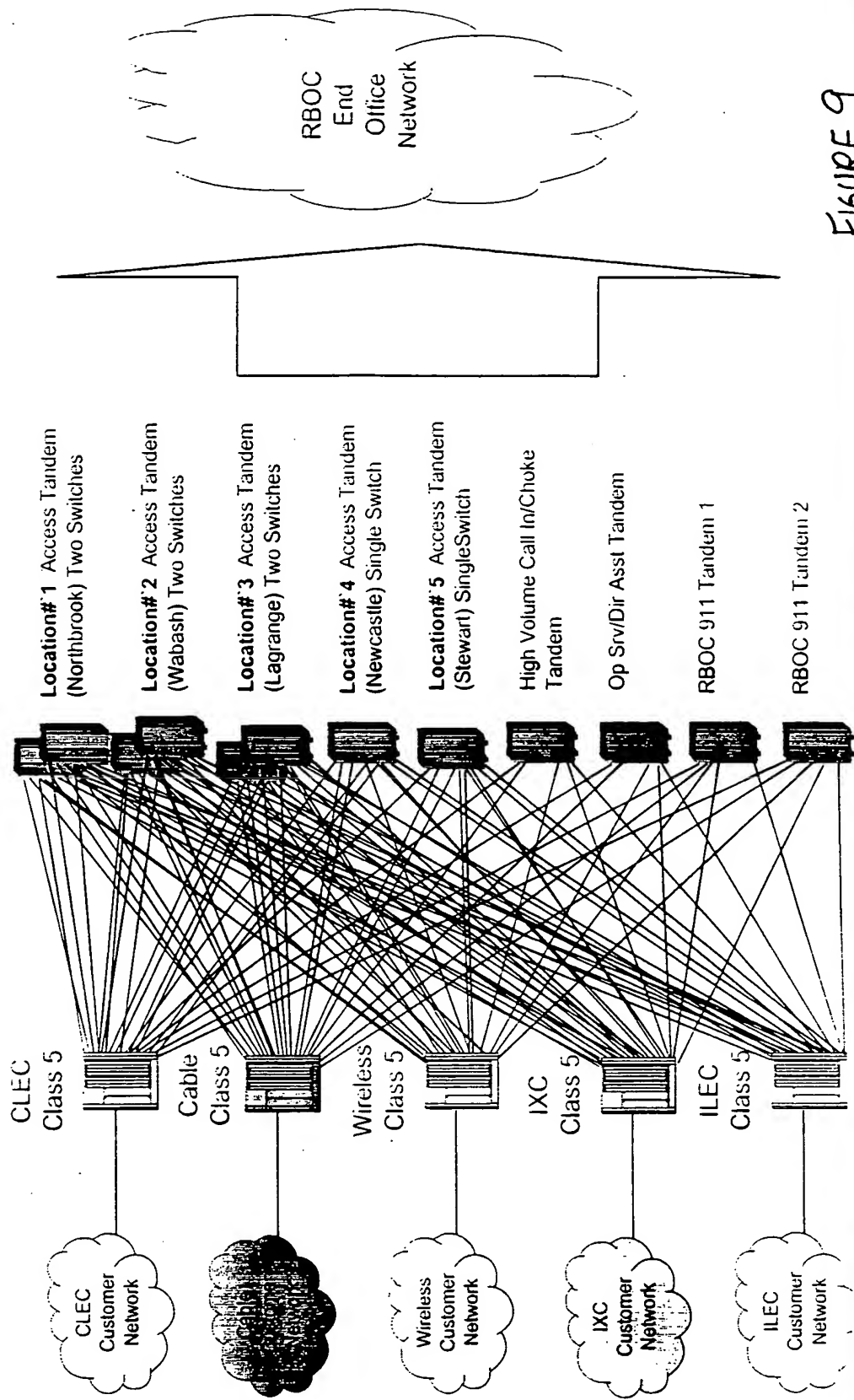


FIGURE 9

Prior Art

20070509 "595/800T

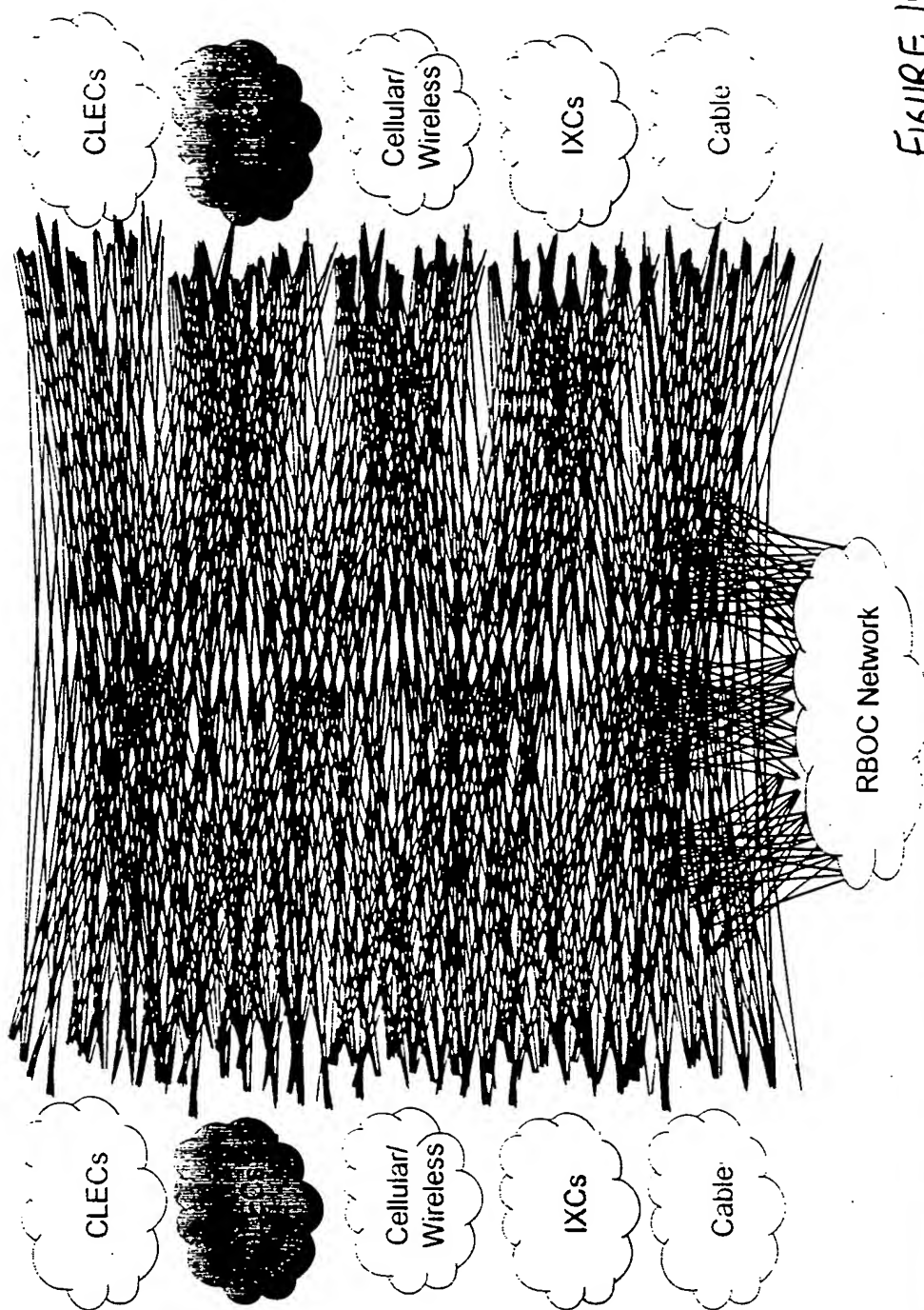


FIGURE 10

PRIOR ART

207050-535/5307

# Ameritech LATA 357 Tandem Trunking Requirements

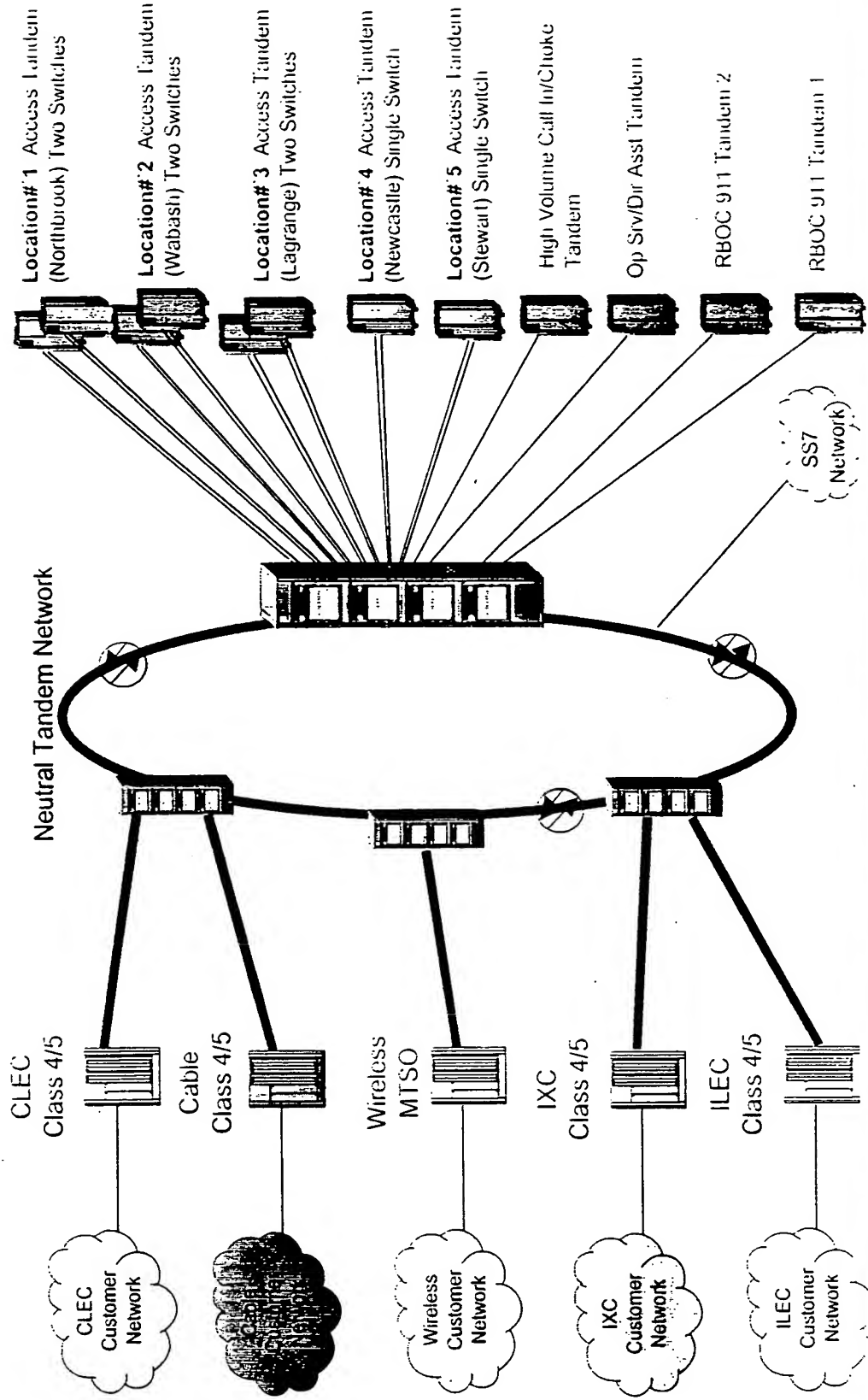
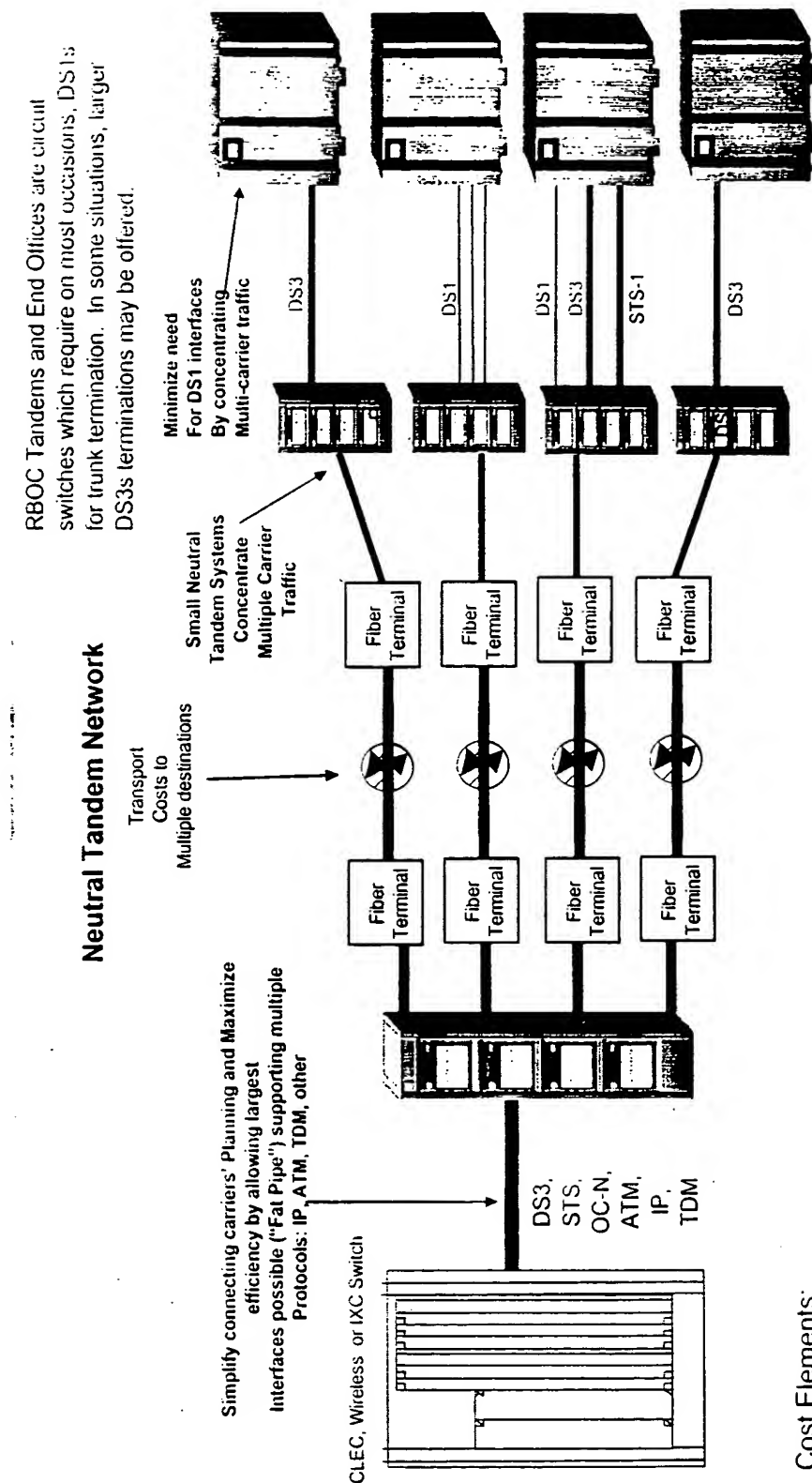


FIGURE 11



RBOC Tandems and End Offices are circuit switches which require on most occasions, DS1s for trunk termination. In some situations, larger DS3s terminations may be offered.

#### Cost Elements:

- NTN reduces connecting carriers' tandem transport to a single "Fat Pipe" to the Neutral Tandem Network. Neutral tandem will be located in convenient Carrier Hotels, Data Centers and Central Offices to minimize the need for carriers to be burdened by high transport costs. Protocols allow for the evolution of the Class 5 switch to the softswitch architecture of the future without the need to incorporate high cost TDM interfaces. NTN routes and terminates traffic at either the serving RBOC tandem or at the RBOC end offices depending on traffic type and efficiency

FIGURE 12

20250" 525/300T

# Ameritech LATA 357 Tandem Trunking Requirements

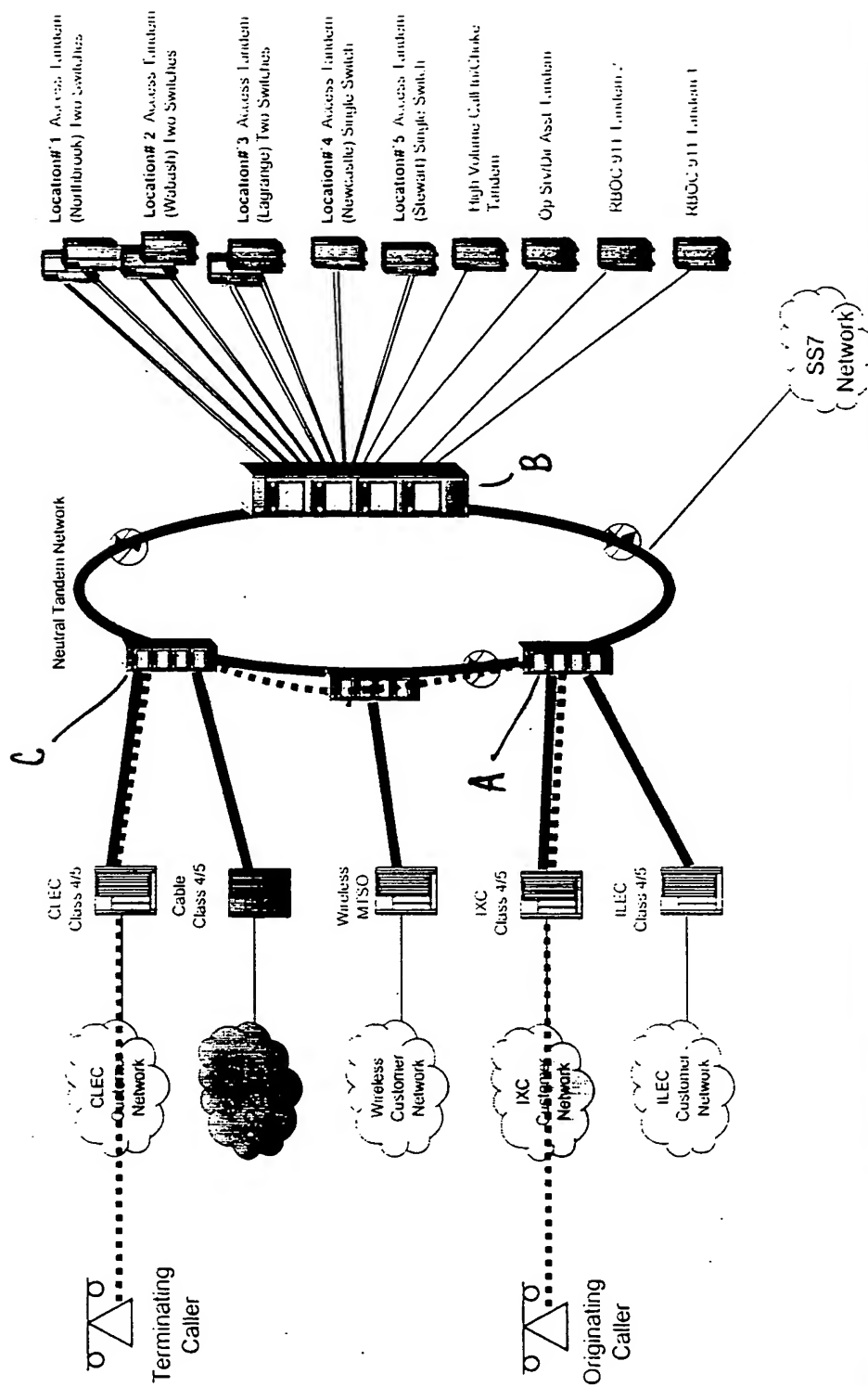


FIGURE 13

207050" 535/800T

# Ameritech LATA 357 Tandem Trunking Requirements

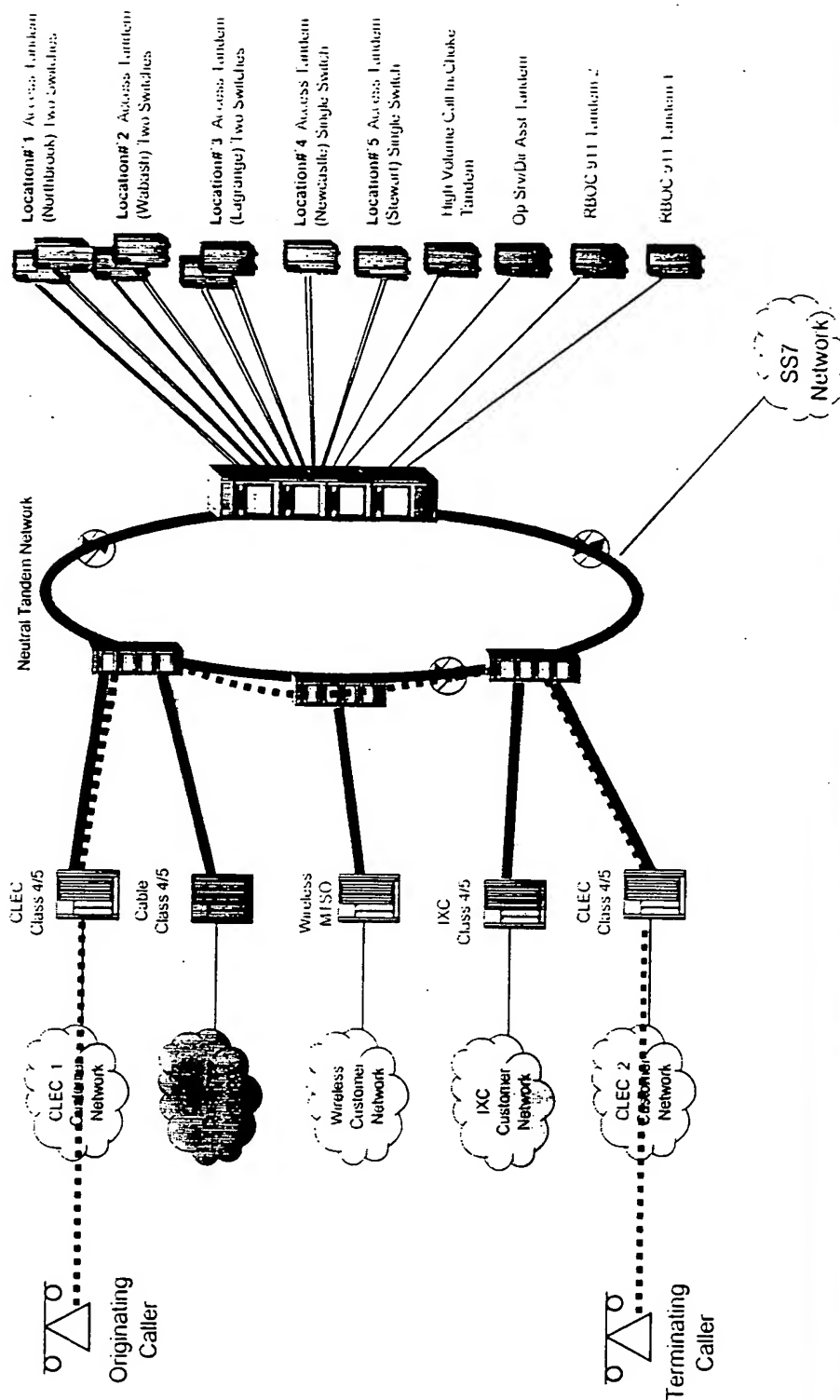


FIGURE 14

307050-525/800T

# Ameritech LATA 357 Tandem Trunking Requirements

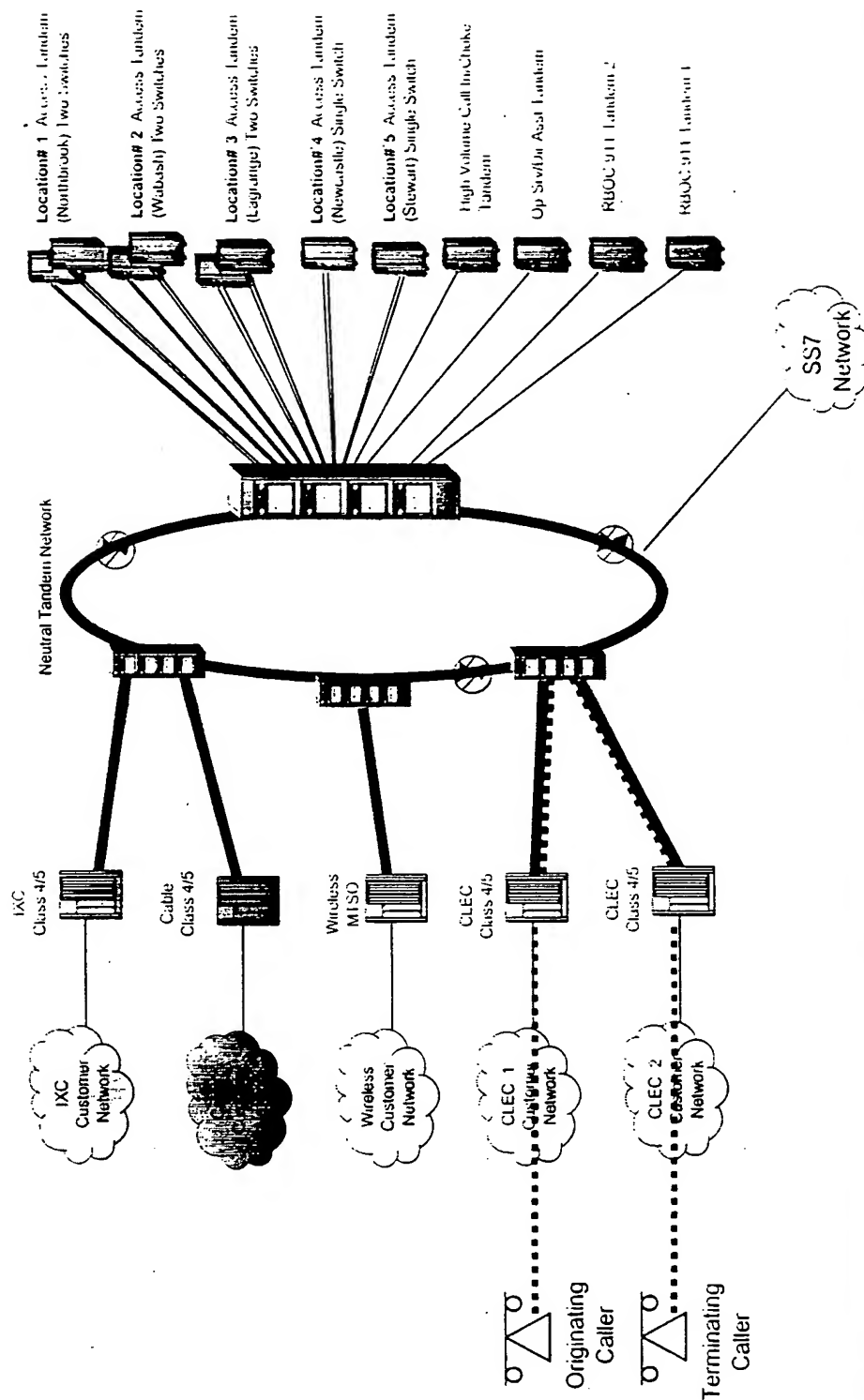


FIGURE 15



800 555 5555

# Ameritech LATA 357 Tandem Trunking Requirements

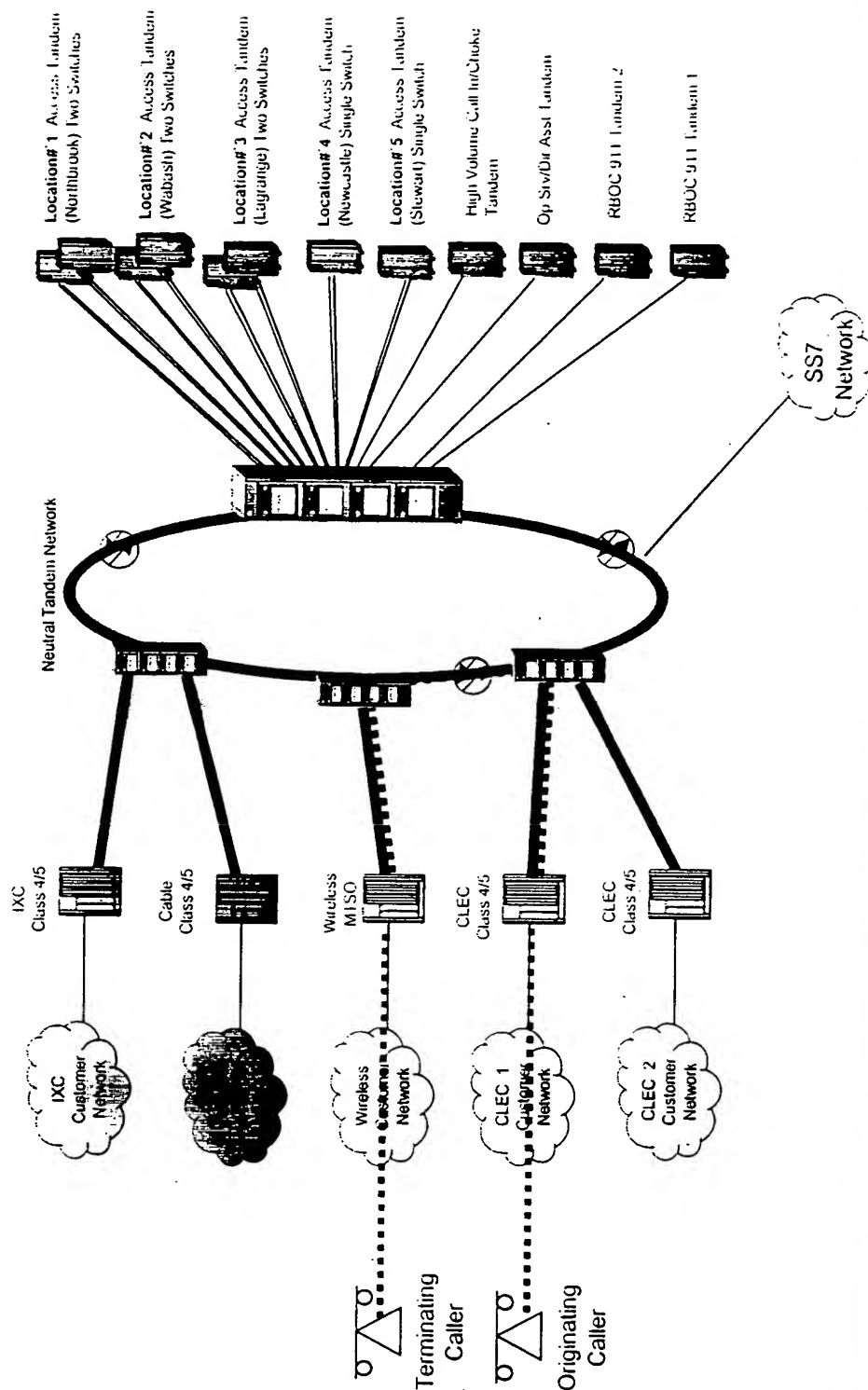


FIGURE 16

# Ameritech LATA 357 Tandem Trunking Requirements

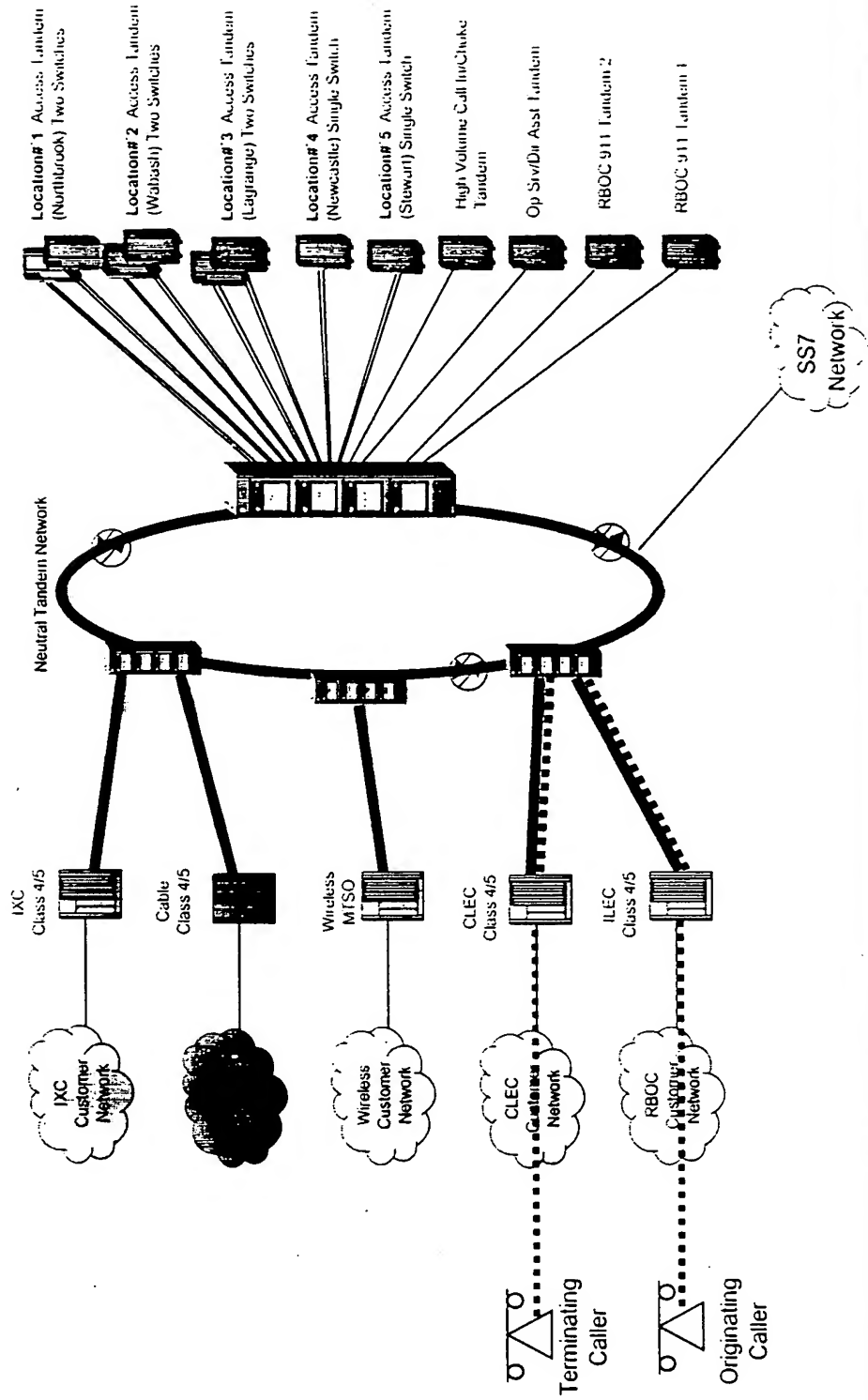


FIGURE 17

337055 " 595 / 5907

# Ameritech LATA 357 Tandem Trunking Requirements

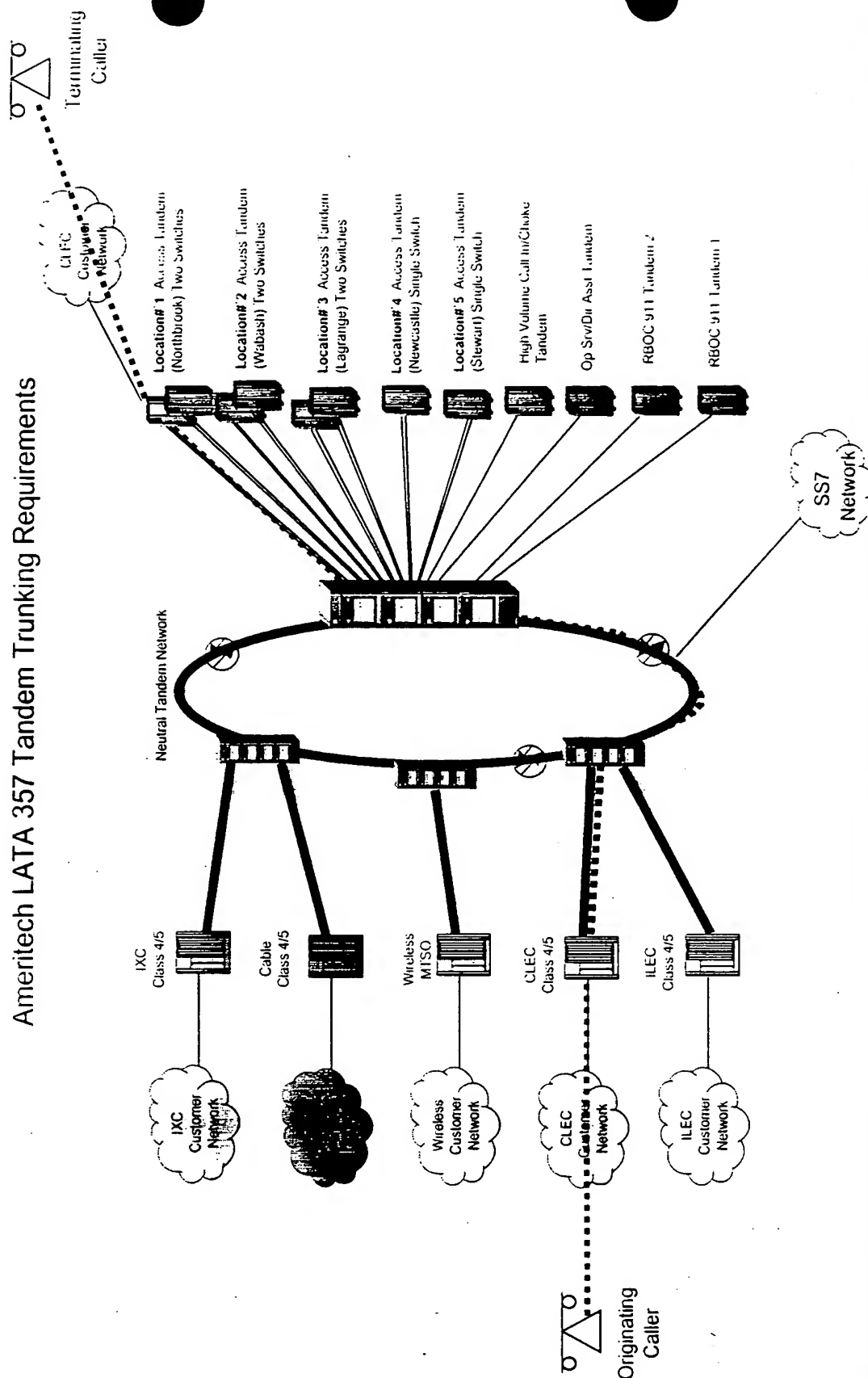


FIGURE 18

# Ameritech LATA 357 Tandem Trunking Requirements

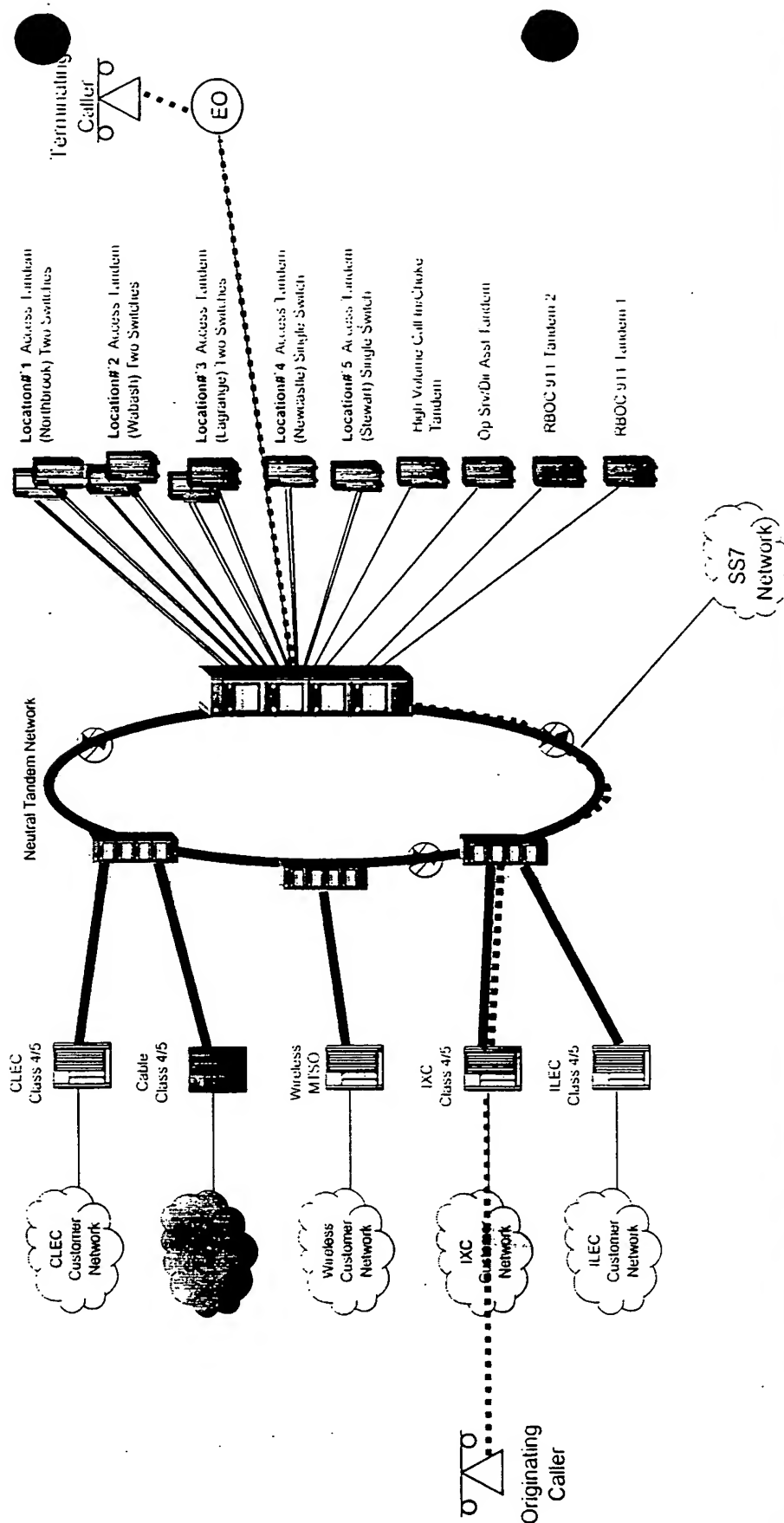


FIGURE 19

[illegible]

## Ameritech LATA 357 Tandem Trunking Requirements

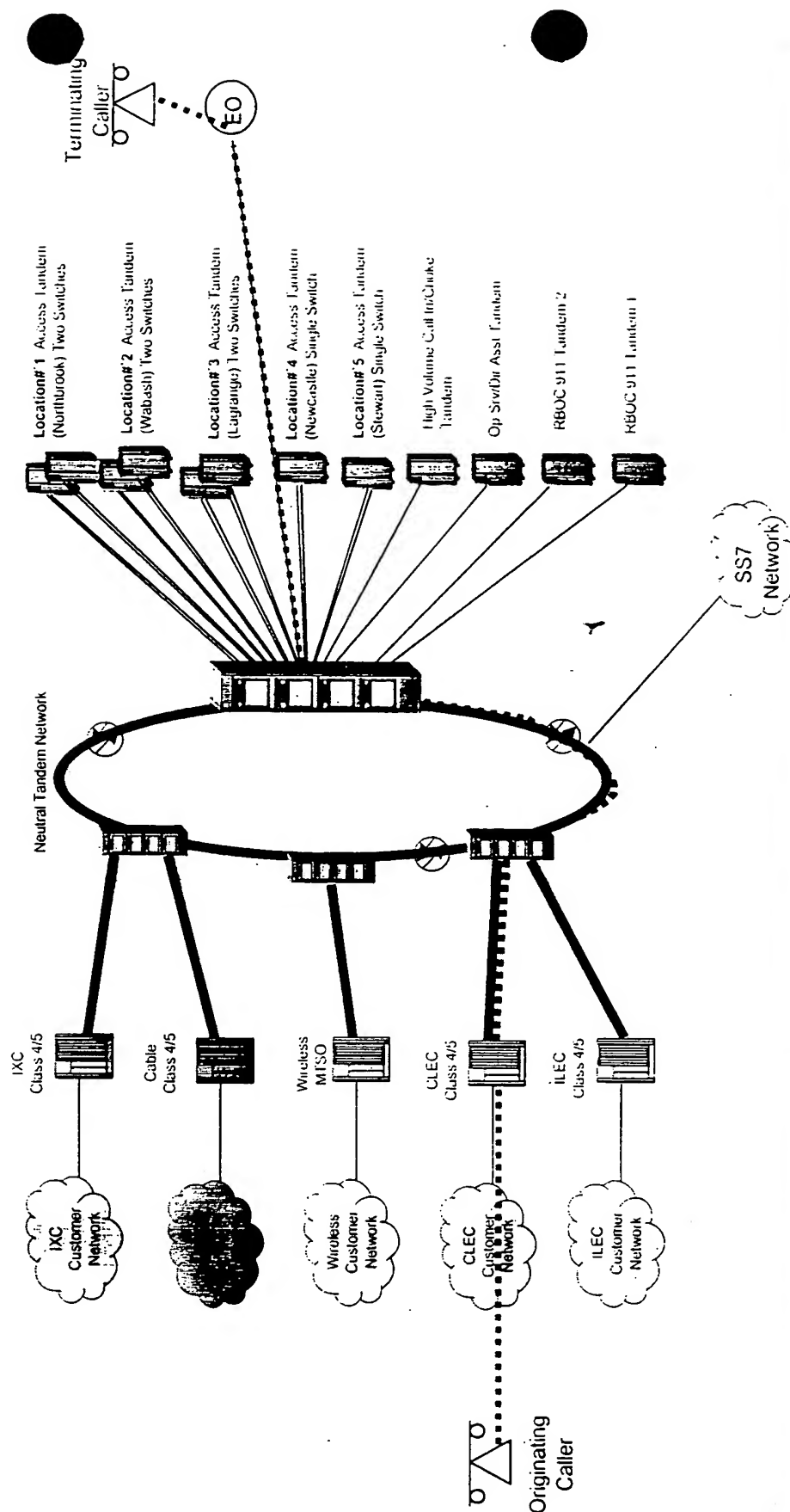


FIGURE 20

**TOTAL**

## Ameritech LATA 357 Tandem Trunking Requirements

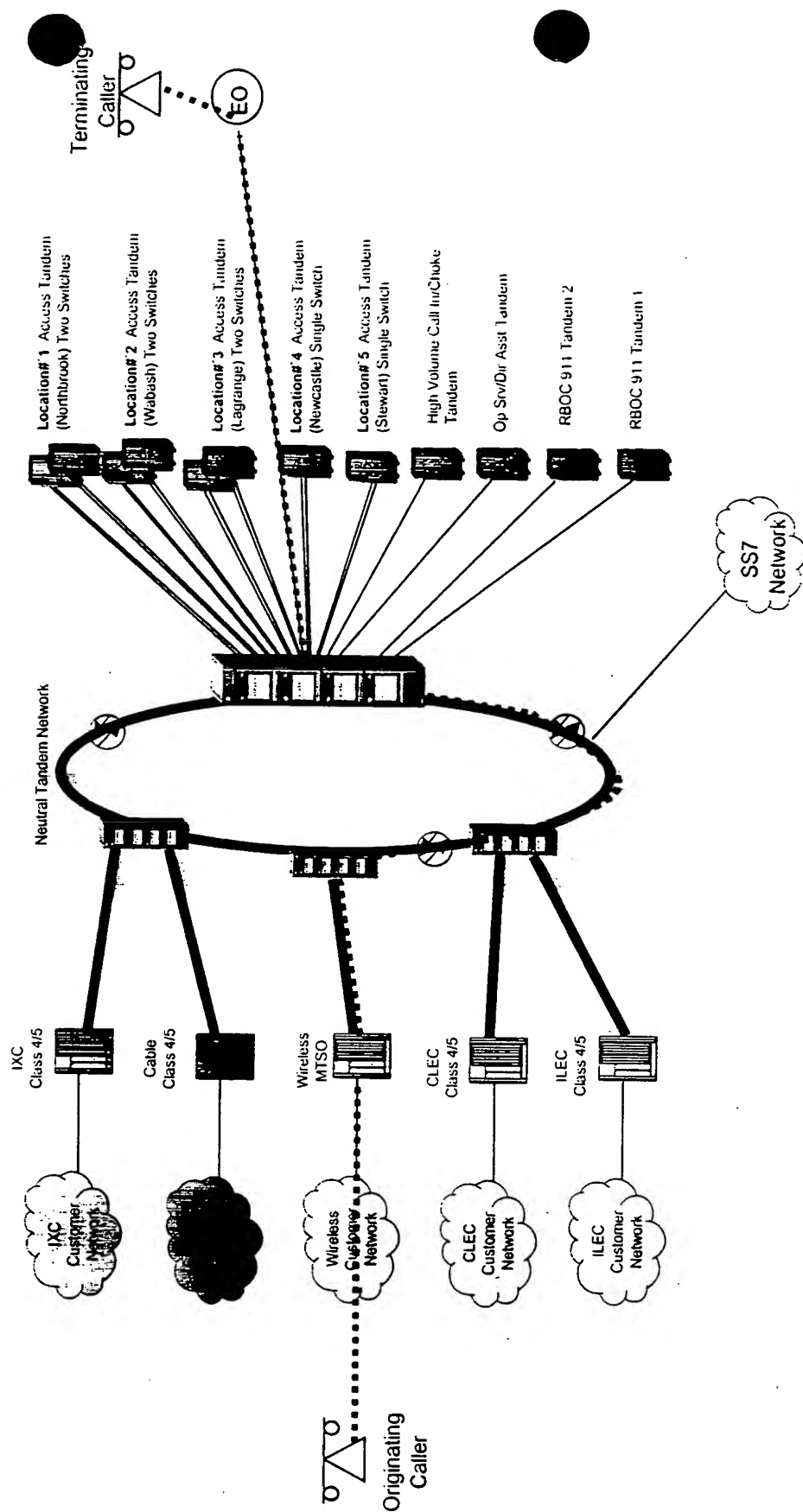


FIGURE 24

# Ameritech LATA 357 Tandem Trunking Requirements

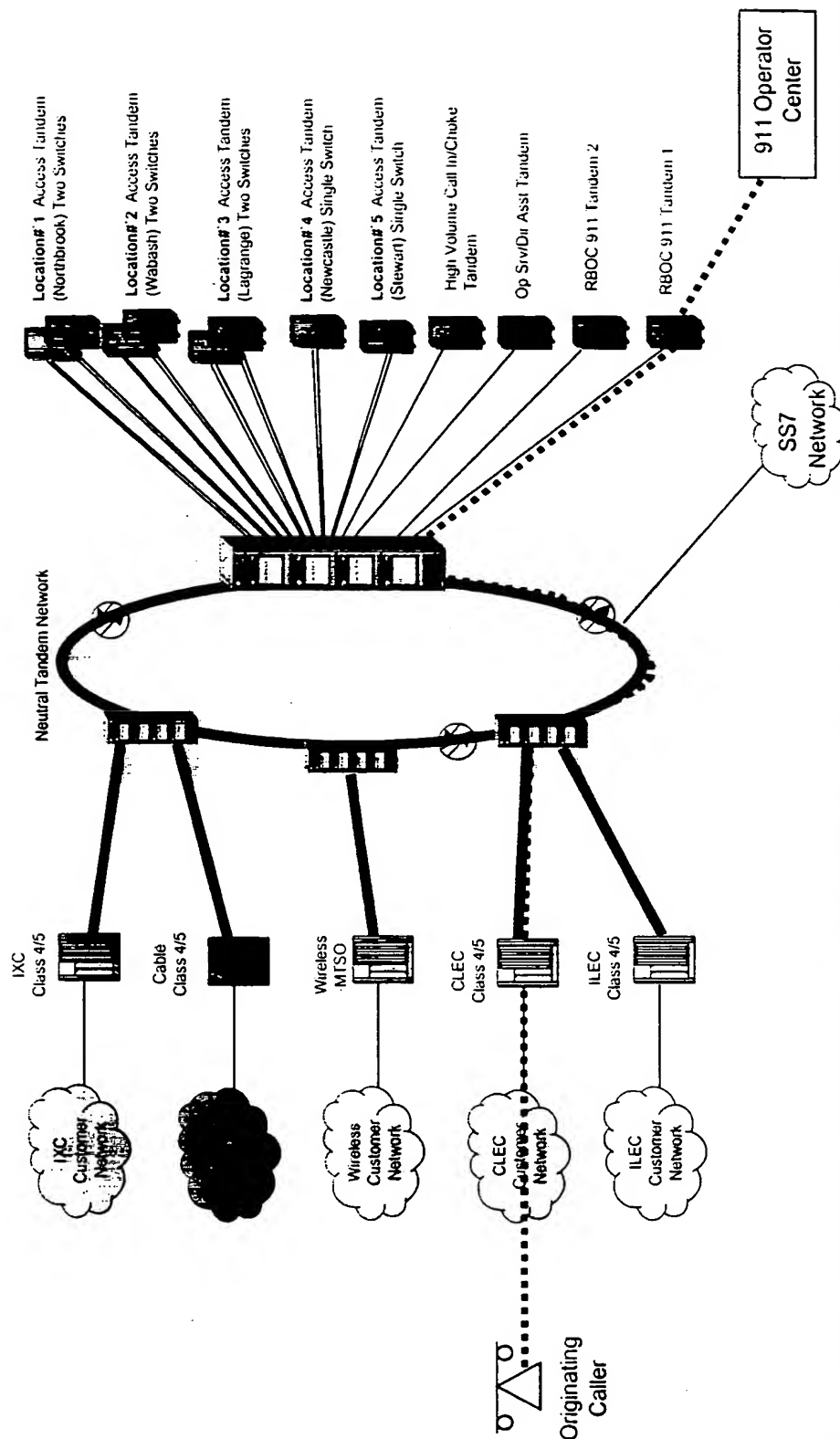


FIGURE 22

# Ameritech LATA 357 Tandem Trunking Requirements

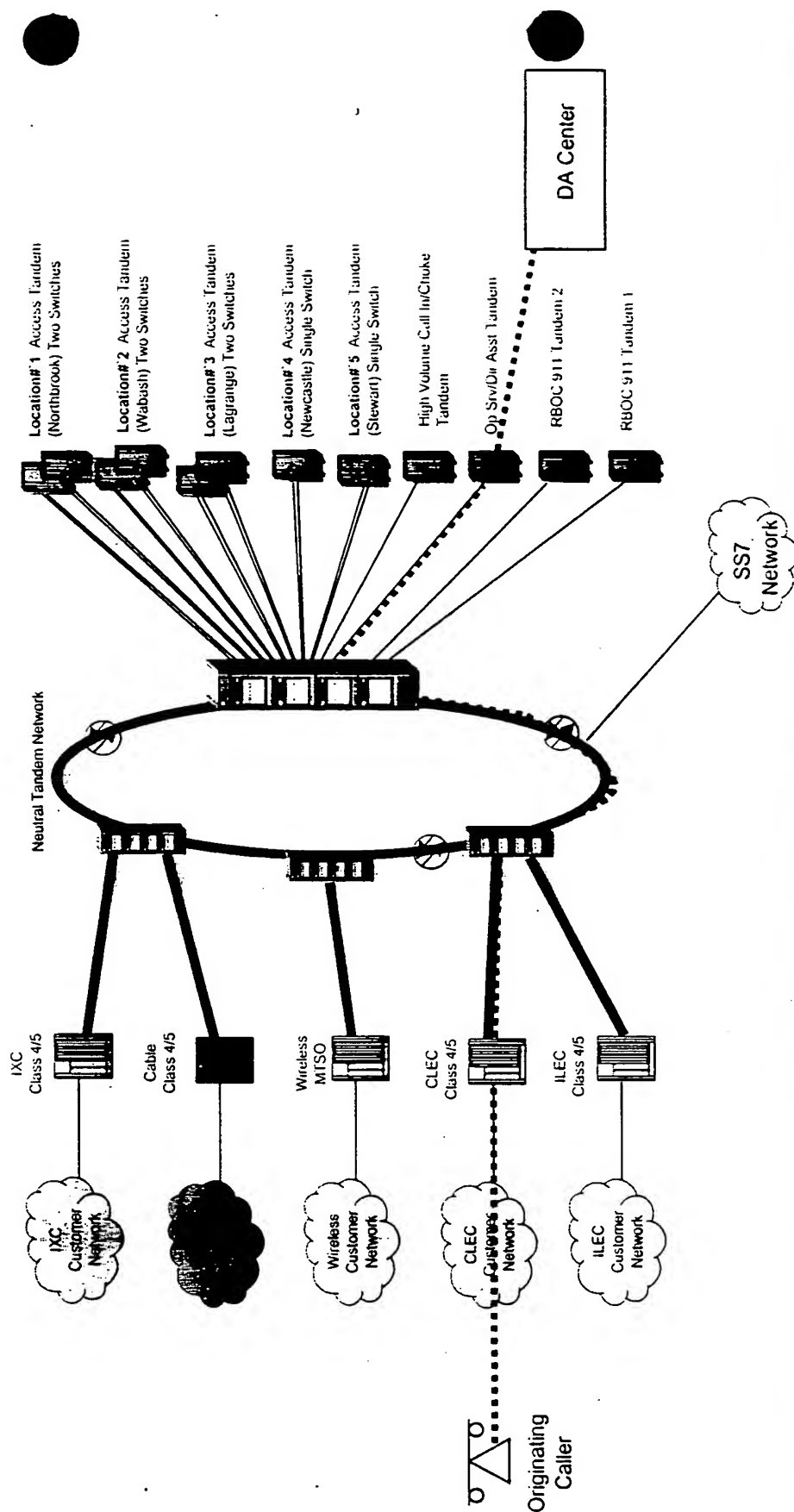


FIGURE 23